

### REMARKS

This response is revised to include the reasoning as to why incorporating the subject matter of claim 2 into claim 1 makes claim 1 patentable. Claims 1, 3, 4, and 6-19 are pending. Claim 2 is cancelled, and its subject matter now is incorporated in claim 1. Similarly, claim 4 is amended to incorporate claim 5, which is canceled. No new matter is presented.

Claims 1, 3, 7, 9, 11, 13, 15, 17, and 19 stand rejected under 35 USC 103(a) as unpatentable over Hirukawa, U.S. Patent Application Publication No. 2003/0048825 A1, in view of any of the following: Matsubara, Japanese Patent No. 03-064980 (called "HAPA-1" by the Examiner); Tatsumi, Japanese Laid-Open Patent Application No. 11-274644 (called "AAPA-1" by the Examiner); and Matsumoto, Japanese Laid-Open Patent Application No. 11-112087. This rejection is respectfully traversed.

Claim 1, as amended, recites a semiconductor laser device, comprising, *inter alia*, an n-side barrier layer that is present on a side of a lower guide layer, a p-side barrier layer that is present on a side of an upper guide layer, where the p-side barrier layer is thinner than the n-side barrier layer, and where the n-side barrier layer has a width of 70 Å or more.

In contrast, neither Hirukawa, the secondary references cited by the Examiner, the secondary references that variously modify Hirukawa, nor any combination thereof discloses all the limitations of independent claim 1. Applicants will demonstrate the reasoning for this statement in the paragraphs below.

The Office Action states that the layers of Hirukawa are the same as applicants' claimed n-side and p-side layers. Applicants respectfully submit that Hirukawa's n-side and p-side layers are different from applicants' claimed n-side and p-side layers.

For example, Hirukawa neither discloses nor suggests an n-side layer being thicker than a p-side layer or an n-side layer having a width of 70 Å or more. Rather, Hirukawa discloses its two barrier layers being the same width and being 100 Å. Thus, by incorporating claim 2 in

claim 1, applicants have defined more specifically the point that an equal width is not the same as an unequal width.

As the specification explains, applicants' claims recite a width having a demonstrable "optimal effect" (see specification, page 18, lines 9-10). Thus applicants' claims recite 70 Å here for an objective and defined reason; that is, to achieve better results with the configuration of their claimed semiconductor device (see *Id.*). The incorporation of the subject matter of claim 2 in claim 1 reinforces and clarifies the meaning of the term "optimal effect," as disclosed in the specification.

Moreover, applicants respectfully submit that one of ordinary skill in the art, relying on Hirukawa, would not have had a reason to have created the invention as claimed, where the width of the n-side layer would have been 70 Å or more and thicker than the thickness of the p-side layer. Accordingly, no person of ordinary skill in the art would have had reason to have considered Hirukawa at the time the invention was made.

In addition, Fukunaga, U.S. Patent No. 6,127,691, and Nishiguchi, U.S. Patent No. 6,154,476, fail to cure the deficiencies that applicants submit are found in Hirukawa.

Therefore, it is respectfully requested that the rejection under 35 USC 103(b) of claim 1 be withdrawn. Accordingly, claim 1 is allowable.

Claims 3, 7, 9, 11, 13, 15, 17, and 19 are allowable at least due to their respective dependencies from claim 1.

Claims 4, 6, 8, 10, 12, 14, 16, and 18 stand rejected under 35 USC 103(a) as unpatentable over Hirukawa as variously modified in view of secondary references.

Claim 4 recites substantially similar subject matter as claim 1. Just as the subject matter of claim 2 was incorporated in claim 1, applicants have incorporated the subject matter of claim 5 in claim 4. Similarly, applicants have more clearly defined the point that an equal width is not the same as an unequal width by the claim amendment.

Since claim 1 recites substantially similar subject matter as independent claim 4, applicants respectfully submit that all of the arguments above that are directed to claim 1 apply to claim 4. Therefore, applicants respectfully request that the rejection of claim 4 under 35 USC 103(b) be withdrawn. Accordingly, claim 4 is allowable.

Claims 6, 8, 10, 12, 14, 16, and 18 are allowable at least due to their respective dependencies from claim 4.

In view of the above, each of the claims in this application is in condition for allowance. Accordingly, applicants solicit early action in the form of a Notice of Allowance.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing Docket No. 204552032000.

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Respectfully submitted,

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